

A COMPARISON OF THE INITIAL ACADEMIC ACHIEVEMENT OF FRESHMAN AWARD WINNERS WHO WORK AND THOSE WHO DO NOT WORK

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Often the parents of first term college students feel that a part-time job might interfere with the adjustment of their sons and daughters to their new academic responsibilities. They are apprehensive that part-time employment and a full-time academic schedule will result in poor grades, possibly even probation, on the one hand, or a poor work record on the other hand. Either of these consequences could adversely affect the future of the student, and the parents' primary concern is that the student does the best academic work from the start of which he or she is capable. For many years, counselors at the secondary and college levels have been concerned with identifying the adjustment problems of first term college students and helping those students overcome their problems in a successful manner.



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Nevertheless many students find it necessary to work to supplement their own financial resources, including any possible financial aid which they may have received. At some institutions, notably Berea College, Blackburn College, and Antioch College, students are required to work, or a work experience has been integrated into the curriculum (Adams and Stephens, 1970). For a number of reasons, therefore, educators, counselors, and financial aid officers have been interested in the question of whether part-time work is detrimental to academic success of college students, and much research has been focused on this subject.

The literature provides one general conclusion that remains consistent in study after study: a reasonable amount of part-time employment (i.e., 15 to 20 hours of work per week) has no statistically significant effect on the academic achievement of students. One researcher came to this conclusion over a decade ago but also noted that, while the differences in academic achievement among the sampled populations of workers and non-workers were not significant at the .01 level of confidence, the student workers usually achieved higher academic scores than the non-workers (Keene, 1960). In general, subsequent investigations arrived at the same conclusion. An illustration is a University of Illinois dissertation (Kelly, 1970), which reported no significant differences in academic achievement between those who worked and those who did not. Some educators have attributed important educational values to part-time student work, maintaining that a reasonable amount of such work tends to enhance the socialization process for students and reinforce their academic achievement especially if related to the student's academic major. (Adams and Stephens, 1972)

Analytical studies of this problem have utilized the format of sampling general populations of student workers and non-workers. It was determined, therefore, to initiate a longitudinal study at Southern Illinois University that would focus, among other things, upon populations rather than samples and upon initial adjustment to college as well as retention and eventual successful completion of the degree. In addition, there was interest in comparing the academic achievement of needy and non-needy student workers and non-workers. The total study has been planned for longitudinal measurements over a minimum period of five years. The present essay is a report of the data obtained in the initial phases of the long-term project.

The Current Study

This study sought to answer the following question: How do the initial grade point averages of financially needy students who work compare with the grade point averages of financially needy students who do not work? These comparisons could be made in perspective with the overall grade point averages of the students' respective classes as background. Furthermore, the composite scores on the entrance test of the American College Testing Program (an academic intelligence test) would be available for each population as an indicator of any artifacts of selection or extrinsic cultural factors related to ability that might affect a student's membership in a population.

At Southern Illinois University at Carbondale, a "natural population" of financially needy students are those who receive monetary awards from the Illinois State Scholarship Commission. To receive an award, a student must qualify under the Commission's need analysis. The award is restricted to tuition and fees; therefore, an "unmet need" may remain that could make it necessary for a student to work for additional resources. Furthermore, the Commission denotes the recipients as "Scholars" or as "Grantees." The Scholars are defined as such by reason of high composite scores on the ACT test, and Grantees are those who made lower scores on that test. Usually about 15% of the award winners in a given class will be designated as Scholars. This external grouping according to ability would permit further analysis of grade point averages.

"Initial grade point averages" was defined as the average of the final marks received by freshmen upon completion of the fall term. The entering freshman classes at Southern Illinois University at Carbondale for the fall term, 1972, and the fall term, 1973, were chosen as the general populations for this report.

"Financially needy students who worked" was defined as all freshman recipients of the ISSC monetary awards who worked at an on-campus job, earning a minimum of \$50.00 per quarter and whose earnings for the first three terms of attendance averaged at least \$180.00 per quarter. Freshman ISSC award recipients who worked but did not meet these minimum criteria were eliminated from both the working category and the non-working category of students.

"Financially needy students who did not work" was defined as all freshman recipients of the ISSC monetary award who did not hold an on-campus job during their first three quarters of attendance.

The GPA, or grade point average, is calculated at Southern Illinois University on a 5-point grading scale as follows:

Letter Grade	Points Per Credit Hour
A	5
B	4
C	3
D	2
E (Fail)	1

Total points divided by the number of credit hours is the GPA.

The data for the freshman class, 1972, and the freshman class, 1973, were gathered for each of the three populations (the general population, the financially needy students who worked, and the financially needy students who did not work) for both years and are presented in the next section of this report.

The Findings

The results of the study for this report are shown in three tables below. Table 1 summarizes the data for the financially needy students and the general population (in all cases, freshmen). The grade point averages correspond

closely to the composite scores on the ACT test. These data indicate that the financially needy students achieve as well in their academic work as others.

TABLE 1. Summary of Grade Point Averages for ISSC Freshman Award Recipients and All Freshmen at Southern Illinois University at Carbondale, Fall, 1972, and Fall, 1973.

GROUPS	FALL - 1972			FALL - 1973		
	X NO.	X GPA	X ACT	X NO.	X GPA	X ACT
ISSC Scholars	130	4.016	27	96	4.024	27
ISSC Grantees	756	3.381	19	807	3.270	18
Total Scholars & Grantees	886	3.474	20	903	3.350	19
Total Freshmen at SIU - C	4,174	3.420	21	4,137	3.410	20

Table 2 presents the grade point averages for higher ability financially needy students (ISSC Scholars) who worked and those who did not work. The data include freshmen only for the fall term, 1972, and the fall term, 1973. Because academic achievement as indicated by marks differs considerably for men and women, the data are shown for both sexes for each population.

A statistical significance test is, of course, inappropriate for differences between populations. The differences in GPA shown in all tables are the real differences, and the importance of the magnitudes of the differences shown depends upon the purposes and the criteria of the judgment to be made. In each instance of comparison between working students and non-working students shown in Table 2 except one, the workers achieved a higher grade point average than the non-workers. In the case of the female workers and female non-workers for the fall term, 1973, the difference was .004 in favor of the non-workers.

TABLE 2. Initial Academic Achievement of Financially Needy Freshmen Students of Higher Ability (ISSC Scholars) Who Worked and Those Who Did Not Work, Fall Term, 1972, and Fall Term, 1973, at Southern Illinois University at Carbondale.

ISSC SCHOLARS	FALL - 1972			FALL - 1973				
	X NO.	X GPA	DIF- FER- ENCE	X ACT	X NO.	X GPA	DIF- FER- ENCE	X ACT
MALE								
WORKERS	19	4.094		27	11	4.169		27
NON-WORKERS	44	3.738	.356	27	38	3.935	.234	27
FEMALE								
WORKERS	28	4.325		26	12	4.060		27
NON-WORKERS	39	4.070	.255	27	35	4.064	(.004)	26
TOTAL (M & F)								
WORKERS	47	4.231		26	23	4.112		27
NON-WORKERS	83	3.894	.337	27	73	3.997	.115	27

Table 3 presents the grade point averages for lower ability financially needy students (ISSC Grantees) who worked and those who did not work. The data include freshmen only for the fall term, 1972, and the fall term, 1973. As in Table 2, the data are shown for both sexes as well as for the total population. Among the ISSC Grantees, the workers achieved higher GPA's in 1972 than the non-workers. However, in 1973, the male non-workers achieved a higher GPA than the workers by a difference of .190. The mean composite ACT

scores for these two groups would, however, seem to indicate an important explanation for the difference shown.

TABLE 3. Initial Academic Achievement of Financially Needy Freshman Students of Lower Ability (ISSC Grantees) Who Worked and Those Who Did Not Work, Fall Term, 1972, and Fall Term, 1973, at Southern Illinois University at Carbondale

ISSC GRANTEES	FALL - 1972				FALL - 1973			
	X NO.	X GPA	DIF- FER- ENCE	X ACT	X NO.	X GPA	DIF- FER- ENCE	X ACT
MALE								
WORKERS	86	3.428		19	95	3.124		17
NON-WORKERS	302	3.274	.154	20	318	3.314	(.190)	20
FEMALE								
WORKERS	141	3.658		19	127	3.339		17
NON-WORKERS	227	3.334	.324	18	267	3.236	.103	17
TOTAL (M & F)								
WORKERS	227	3.571		19	222	3.247		17
NON-WORKERS	529	3.300	.271	19	585	3.278	(.041)	18

Discussion and Conclusion

It would appear from the findings presented above that part-time work in an on-campus job at Southern Illinois University at Carbondale does not interfere with the initial academic adjustment of students at that institution. The data presented in this report do not permit generalization beyond this point. The findings indicate, however, that it is imperative to study initial academic achievement in other institutional environments and in off-campus employment situations. Undoubtedly a comprehensive and sophisticated research approach will reveal those conditions of employment that facilitate and those that deter academic achievement. To identify these conditions and related factors at one institution, the long-range study at Southern Illinois University is dedicated.

While the related literature and the findings here are favorable to part-time student employment, care should be exercised in generalizing these findings to the case of an individual student. While students in general may not be adversely affected by part-time employment, a given student may indeed be so affected. Conversely, an individual student may be unusually benefited by part-time employment. The needs of students vary to such an extent that, whether they are of average or high ability, the professional judgment of the counselor is indicated.

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